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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,216	09/16/2004	Naoki Hayashida	257336US0PCT	5561
22850	7590	08/14/2006		
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ZIMMER, MARC S	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/507,216

**Applicant(s)**

HAYASHIDA ET AL.

**Examiner**

Marc S. Zimmer

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21, 23-26 and 28-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-20, 26 and 36-46 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 8, 21, 28-30, 32 and 47-49 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 9, 10, 23-25, 31 and 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/3/06</u> | 6) <input type="checkbox"/> Other: _____  |

The rejections over Kato, Kamitani, and Kashiwabara are hereby withdrawn in view of Applicant's amendments/remarks. The Examiner agrees that these references do not fairly suggest optical recording media as substrates onto which the composite coating is applied. However, in the course of carrying out a modified survey of the prior art, new references that are anticipatory of at least some of the claims were discovered.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7-8, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogawa et al., U.S. patent # 5,425,988. They disclose an optical recording device having applied thereon a protective film and a lubricity-imparting layer derived from a perfluoroorgano-substituted silane. A structural description of the silane is provided in column 2, line 42 through column 3, line 5. Numerous protective films are contemplated in column 4 including SiO<sub>2</sub> which, as one of ordinary skill will appreciate may be prepared by hydrolysis/polycondensation of a tetraalkoxysilane. Lubricity is said to be inherent in the silane compound from which the topcoat is derived in column 7, lines 47-53.

Claims 1, 2, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayashida et al., U.S. patent # 6,576,320.

The applied reference has a common assignee/inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Hayashida describes an optical information medium that is coated with a cured polysilazane (column 4, lines 34-47) featuring high abrasion resistance according to column 11, lines 15-16. It is further contemplated that a layer having lubricity/oleophobicity may be formed over the cured polysilazane by reacting a silane compound bearing perfluorinated hydrocarbon groups with the cured polysilazane layer.

Claims 1-2, 7-8, 21, 28-30, 32, and 47-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayashida et al., U.S. Patent Application Publication No. 2003/0211276.

The applied reference has a common assignee/inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this

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application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Hayashida discloses an optical information medium featuring a hard underlayer featuring Si-O moieties and, in one embodiment, a top layer derived from perfluoropolyether-bearing silanes. As the SiO containing layer are identified, in particular, glass or a thin layer of SiO<sub>2</sub>. See paragraphs 52, 65-69, and 101-105. Of course, where the variables "x" and "y" in formulae 5 and 6 represent low numbers, the limitations of claims 3 and 30 are inherently satisfied.

***Allowable Subject Matter***

Claims 4,6,9,10 and 23-25,31,33-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 11-20, 26, and 36-46 are allowed.

Jallouli et al., U.S. Patent Application Publication No. 2004/0253369 is cited as being of interest because it describes optical lenses on which are coated a scratch resistant underlayer and an outer layer derived from perfluoropolyether silanes. However, the filing date of the application on which it is based does not antedate the effective filing date of the instant invention. Sakhrani et al., U.S. Patent # 6,582,823 is cited as being of interest for its disclosure of a lens substrate on which are coated an SiO<sub>2</sub> hardcoat and a perfluoropolyether topcoat devoid of silicon atoms. Falcone et al., U.S. patent # 6,551,703 discloses a recording medium on which is coated a

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fluoropolyether containing silicon atoms but the hardcoat is made of carbon and the fluoropolyether does not rely on a condensation reaction between hydrolyzable silyl moieties for it to be robustly grafted to the hardcoat.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 8, 2006



MARC S. ZIMMER  
PRIMARY EXAMINER